Intermediate forms of Hairy-breasted Barbet *Tricholaema*hirsuta in the Lesio-Louna Reserve, Congo-Brazzaville

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Formes intermédiaires du Barbican hérissé Tricholaema hirsuta dans la Réserve de Lesio-Louna, Congo-Brazzaville. Des photos sont présentées d'un couple de Barbicans hérissés Tricholaema hirsuta dans la Réserve de Lesio-Louna, Congo-Brazzaville. Chez le premier oiseau la moustache est large et distincte, tandis que le sourcil ne comprend que quatre petits traits blancs. Chez le deuxième, le sourcil est beaucoup plus net, bien qu'il ne consiste également que de quatre traits, tandis que la moustache se limite à une grande tache au-dessous des parotiques, ne s'étendant par vers le bec. Les deux oiseaux sont densément tachetés de jaune sur le front, la nuque et le dos. Les parties supérieures du premier individu apparaissent plutôt brunes, contrastant peu avec les parties inférieures, tandis que le second est plus noir au-dessus et plus jaune en dessous. Les deux oiseaux ont la gorge blanchâtre mouchetée de noir. Les oiseaux présentent ainsi des caractéristiques intermédiaires entre la sous-espèce ansorgii et les formes flavipunctata ou angolensis.

The aim of this note is to discuss the subspecific identity of a pair of Hairy-breasted Barbets *Tricholaema hirsuta* present in the Lesio-Louna Reserve, 140 km north of Brazzaville, on the Bateke Plateau of Congo-Brazzaville (03°16'S 15°29'E). Between 2 and 5 December 2005 one of the pair was observed excavating a hole within a branch of a dead tree, in a narrow strip of degraded forest in wooded grassland between two gallery forest patches. On 13, 15 and 28 December, one of the pair was observed with its bill and forehead emerging from the hole. On the next visit, on 28 January 2006, none was seen, but another individual was observed singing 600 m north of this site on 15 February 2007, and its song was subsequently heard in the same area until at least April.

The racial identity of these birds is not obvious. *T. hirsuta* is the most morphologically variable of all Afrotropical barbets and, consequently, has caused much confusion amongst taxonomists. Four subspecies are generally recognised: *hirsuta* in the west, *ansorgii* in the east, *angolensis* in the south-west, and *flavipunctata* in the north-centre of the species' range (Short & Horne 1988, 2001, 2002, Fishpool 2005; see Fig. 1). Intergradation between the subspecies is well known (Short & Horne 1988, 2001, 2002), and photographs of an intermediate *hirsuta* / *flavipunctata* were published in Fishpool (2005).

Of the pair observed in 2005, both birds had black head-sides and white facial stripes, characteristic of *ansorgii*, although the facial stripes were

significantly reduced. In one of the pair (Figs. 2-3), the moustachial stripe was rather broad and distinct, whilst the supercilium comprised just four small white streaks. In the other (Figs. 4–5), the supercilium was much more distinct, although still broken into four streaks, whilst the moustachial stripe was non-existent anteriorly, but is apparent as a large spot below the ear-coverts. Both birds possessed strong yellow spotting on the nape and back (Figs. 2 and 5), and on the forehead (Figs. 3 and 4), a feature characteristic of flavipunctata and angolensis rather than ansorgii. The upperparts of one bird appeared fairly brown, offering rather little contrast with the underparts (Figs. 2-3), in this being suggestive of angolensis, whilst the other individual appeared blacker above and yellower below (Figs. 4-5), thereby agreeing more closely with flavipunctata or ansorgii. Both had a whitish throat mottled black (Fig. 4), typical of all three races.

The single bird observed at some distance in 2007 appeared to have an overall black head, with only the suggestion of a white supercilium, some yellow speckling on the nape, a mottled whitish throat, a blackish-brown back and yellowish underparts. Again, these characters suggest an intermediate form.

It seems probable that the grassland-dominated Bateke Plateau separates the two subspecies generally regarded as occurring in Congo-Brazzaville, namely *ansorgii* to the north and *angolensis* to the south-west. However, west of

the Bateke Plateau lie the forests of central Gabon, where the transition occurs from *flavipunctata* in the north to *angolensis* in the south (see Fig. 1). Rand *et al.* (1959) believed this transition to be abrupt, and to be located at *c*.02°S. It is conceivable that *flavipunctata* extends from the forests of central Gabon, south-east through the gallery forests of the Bateke Plateau. I tentatively suggest that the Lesio-Louna birds reported here are principally of *ansorgii I flavipunctata* origin, although the possible influence of *angolensis* cannot be discounted.

Whilst most recent texts claim yellow spotting on the forehead to be absent (Short & Horne 2002, Fishpool 2005), or only occasional (Short & Horne 1988), in *T. h. ansorgii*, examination of 69 specimens of this taxon at the Royal Museum for Central Africa at Tervuren, from three regions











of Congo-Kinshasa, revealed that 15 (22%) had yellow spots on the forehead. There appeared to be regional differences, with 45% (five of 11) from the Ubangi region exhibiting yellow spots on the forehead, 29% (5 of 17) from the Kunungu region, and only 12% (5 of 41) from the Equateur region. Two (3%) of the 69 specimens examined appeared to have slightly reduced facial stripes. Again, cases of partial or reduced facial stripes are not generally discussed in recent texts. Interestingly, whilst the intermediate bird photographed in Fishpool (2005) possessed a conspicuous white supercilium, on closer inspection this appears to comprise four separate streaks, rather than a single continuous one, in a similar if less obvious pattern to the two Lesio-Louna birds illustrated here.

Captions to figure and photos on opposite page

Figure 1. Approximate distributions of the four races of Hairy-breasted Barbet *Tricholaema hirsuta*, with the Bateke Plateau region delineated in red.

Aires de distribution approximatives des quatre sousespèces du Barbican hérissé *Tricholaema hirsuta*, avec le Plateau des Batéké délimité en rouge.

Figures 2–3. One of a pair of Hairy-breasted Barbet *Tricholaema hirsuta*, Lesio-Louna Reserve, Congo-Brazzaville, December 2005 (Tony King)

Un membre d'un couple de Barbicans hérissés *Tricholaema hirsuta*, Réserve de Lesio-Louna, Congo-Brazzaville, décembre 2005 (Tony King)

Figures 4–5. The second of a pair of Hairy-breasted Barbet *Tricholaema hirsuta*, excavating a hole in a dead tree, Lesio-Louna Reserve, Congo-Brazzaville, December 2005 (Tony King)

L'autre membre d'un couple de Barbicans hérissés Tricholaema hirsuta, creusant un trou dans un arbre mort, Réserve de Lesio-Louna, Congo-Brazzaville, décembre 2005 (Tony King)

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References

Fishpool, L. D. C. 2005. An intermediate form of Hairy-breasted Barbet *Tricholaema hirsuta*. *Bull. ABC* 12: 172–173.

Rand, A. L., Friedman, H. & Traylor, M. A. 1959. Birds from Gabon and Moyen Congo. *Fieldiana Zool*. 41: 221–411.

Short, L. L. & Horne, J. F. M. 1988. Family Capitonidae. In Fry, C. H., Keith, S. & Urban, E. K. (eds.) *The Birds of Africa*. Vol. 3. London, UK: Academic Press.

Short, L. L. & Horne, J. F. M. 2001. *Toucans, Barbets and Honeyguides*. Oxford: Oxford University Press.

Short, L. L. & Horne, J. F. M. 2002. Family Capitonidae (barbets). In del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) *Handbook of the Birds of the World*. Vol. 7. Barcelona: Lynx Edicions.

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